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REMARKS

In response to the Office Action mailed on December 12, 2006, Applicant respectfully requests reconsideration. To further prosecution of this Application, Applicant submits the following amendments as well as remarks discussing patentability of rejected claims.

Claims 1-37 were previously pending in the subject Application. Claim 32 has been amended to include intervening base claim 1. Claim 35 has been amended to include intervening base claims 1 and 34. Claim 34 is being canceled. Thus, no new matter has been added to the pending claims. Applicant respectfully requests reconsideration and allowance of the pending claims.

Applicant encourages the Examiner to call the undersigned Attorney if the Examiner feels such a call would further prosecution of this application towards allowance.

Objection to Claims 7-12 and Claims 22-27

Applicants are appreciative of the Examiner's review of the pending claims and allowance of claims 7-12 and 22-27.

Objection to Figures

The office action includes an objection to the figures. Applicant respectfully submits that, contrary to the Examiner's assertion, there is no rule that all text in the claims be included in respective steps of a flowchart in a non-provisional patent application. The only requirement is that the drawings in a nonprovisional application show every feature of the invention specified in the claims. The original and newly submitted claims are fully supported by both the original figures and corresponding text. Accordingly, the Examiner's objection and assertion that the figures should be amended is improper.

Rejection of Claims 31-37 under 35 U.S.C. §112(a)

The Examiner rejects claims 31-37 under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention.

With regard to the rejection of claim 31, Applicant respectfully traverses the rejection because the claims are not indefinite. The claim clearly indicates that the recited data collection agent is one of multiple agents operating in a storage area network environment. Additionally, the claim clearly indicates that at least one summary record is transferred from the data collection agent to the storage management application. Moreover, the claim clearly indicates that the storage management application is configured to receive input from the multiple data collection agents. Accordingly, the rejection of claim 31 is improper.

With regard to the rejection of claims 32-37, Applicant respectfully traverses the rejection because the claims are not indefinite. The Examiner seems to assert that the claims are directed to a "summary of storage information" and that such support was not found in the specification. Applicants are uncertain what the Examiner means by saying that the cited portions of the specification are directed to "file system summary of life span."

Contrary to the Examiner's assertion, the limitations in previously pending claims 32-37 are definite. Moreover, the cited portions as well as uncited portions of the specification are replete with discussions of how agents create so-called summary records or reports based on collection of data.

For example, at page 10, lines 23-30, the Applicant's specification recites:

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Once the agents configured in accordance with embodiments of the invention have collected and processed the file system metadata (i.e., to calculate values such as those in the above example), the agents produce one or more summary report records that contain the results of the agent pre-processing calculations.

At page 10, lines 23-30, the Applicant's specification recites:

The agent collects storage information concerning the set of storage entities according to the data collection policy and processes the collected storage information to produce at least one summary record of the storage information for the set of storage entities. The summary record(s) contain a summary of the collected storage information for the set of storage entities calculated according to the data collection policy.

There are many other instances in the specification supporting the claims. Accordingly, the rejection of claims 32-37 is improper.

Rejection of Claims 1-6 under 35 U.S.C. §103(a)

Claims 1-6 stand rejected under 35 U.S.C. §103(a) as being obvious over Zahavi et al., U.S. Patent No. 6,886,020 (hereinafter Zahavi) in view of Therrien et al., US Patent Application Pub. 2004/0093361A1 (hereinafter Therrien).

The Examiner asserts that the Applicant of the subject application expects to find the same wording used in the claims to map to the prior art without "extracting the concept." Applicant respectfully disagrees with this assertion.

Applicant respectfully submits that the concept shown in Zahavi is to configure a computer to include a collection manager 38. The collection manager 38 communicates over a network connection with a collection agent 30. The collection manager 38 in Zahavi includes a command and control module 40

that issues commands to collection agent 30 for retrieval of data. This is specifically discussed in Zahavi at column 5, line 60 to column 6 line 12.

Further, the collection manager 38 in Zahavi accesses the policy file 42. Policy file 42 specifies data collection intervals for collection of data at different times. Based on use of the policy file, the collection manager collects and stores collected data at the different specified times. This concept is more particularly discussed in Zahavi at column 6, lines 25-36.

The Examiner asserts that the collection agent 30 in Zahavi receives the policy file 42 as does the technique in claim 1. Applicant respectfully disagrees. There is no indication whatsoever that the collection agent 30 in Zahavi receives the policy file 42. Zahavi only discloses that the collection manager 38 receives the policy file 42 and uses it to store collected data. The policy in Zahavi also does not specify what data will be collected by the respective agents.

In contradistinction, and according to the claimed invention, the agent receives the data collection policy. Thus, this aspect of the claimed invention is not taught or suggested by Zahavi contrary to the assertion made in the office action.

Furthermore, note that the collection agent in Zahavi is used to merely gather data. In contradistinction, and according to the claimed invention, the agent produces a summary record that is calculated according to a received data collection policy. In other words, in addition to gathering data, agent functionality as recited by claim 1 performs calculations to produce the summary report. Performing calculations and producing a summary report is not equivalent to merely collecting and forwarding data. Thus, this aspect of the claimed invention further distinguishes it over Zahavi.

Applicants concede that Zahavi includes a collection agent that operates in a storage area network environment. However, the claimed invention includes distinguishing limitations as discussed above.

Use of the data collection policy at the agent (as in the claimed invention and contrary to Zahavi) enables the agent to collect data and, based on calculations, produce the summary record (e.g., a reduced set of data) as opposed to merely forwarding raw data to the storage manager application that would then have to process the collected data and produce a summary report. Because the agent collects data and produces the summary report, the agent according to the claimed invention can reduce how much traffic must be sent over a network from the agent to a collection manager that processes the data for presentation purposes. Additionally, at least part of the burden of processing the collected data is offloaded to the agent as opposed to having to be done by an entity to which the agent forwards the data.

Applicant again respectfully submits that Therrien also does not teach or suggest the claim limitations which recite that the data collection agent supports the functions including receipt of a data collection policy, collection of data, and transferring of collected data as discussed above. The Examiner asserts that Therrien discloses the last two claim limitations of processing the collected storage information to produce a summary record and transferring of the summary record from the data collection agent to the storage management application for presentation to the user. Applicant agrees with the assertion that Therrien (FIG. 8) discloses providing a summary report. However, this is not equivalent to what Applicant claims as the invention and the rejection is improper. In other words, the claimed invention includes limitations not taught or suggested by the cited prior art as discussed above.

First, Therrien discloses use of a protection policy for protecting stored data. Protection parameters are described at paragraphs 53-60 in Therrien. There is no indication whatsoever in Therrien that the protection policy specifies how to collect data as recited by the data collection policy as in the claimed invention. For example, the protection policy in Therrien merely specifies how to protect already stored data. This is not equivalent or suggestive of the data collection policy as in the claimed invention.

Second, there is no indication whatsoever that the protection policy in Therrien (or policy in Zahavi) specifies how to produce or is used to produce the summary report. Figure 8 and corresponding text as cited by the Examiner merely indicates existence and display of the summary report, not use of the protection policy to create the summary report. For example, Figures 1-5 in Therrien indicate that the protection policy is used by the file servers to protect stored data. Mere creation and use of a summary report as in Figures 6-8 of Therrien is not equivalent or suggestive of the data collection policy as recited by the claimed invention. That is, there is no mention that the protection policy in Therrien specifies how to produce the summary report. Thus, Therrien also does not teach or suggest the claimed invention. For these two reasons alone, Therrien does not provide any relevant new teachings for combining with Zahavi to render the claimed invention obvious.

Moreover, similar to the discussion above with respect to Zahavi, note further that Therrien also does not teach or suggest the claim limitations that a data collection agent supports functions such as receipt of a data collection policy, collection of data, creation of a summary record, and transferring of the summary record to a storage management application. For example, as shown in Figure 2 and corresponding text of Therrien at paragraphs 49 and 50, a file system uses the protection policy for protecting stored data, not collecting data as in the claimed invention. The file system does not produce the summary

report or transferring of the summary report to a manager application for display purposes.

In Therrien, each file system includes a so-called node manager 70 that is responsible for collecting asset, status, capacity, and performance data for a respective fileserver node or repository node (See ¶¶ 95-96). The node manager 70 in Therrien can submit the collected data to an LDAP directory for later presentation to administrators via a web-based user interface. (See ¶¶ 97-99) However, as mentioned above, the collected data submitted by the Node Manager does not use the protection policy to identify which data to collect nor does the node manager 70 produce a summary record according to the protection policy. Thus, Therrien does not teach the claimed step of processing collected storage information to produce a summary record containing a summary of the collected storage information calculated according to a data collection policy. In addition, since the Node Manager is not agent and does not produce a summary record, it does not perform the step of transferring the summary record from the agent to a storage management application as in the claimed invention.

For the reasons stated above, Applicant submits that claim 1 is patentably distinct and advantageous over the cited prior art, and the rejection of claim 1 under 35 U.S.C. §103(a) should be withdrawn. Accordingly, allowance of claim 1 is respectfully requested. If the rejection of claim 1 is to be maintained, Applicant respectfully requests that it be pointed out with particularity where the cited prior art discloses or suggests all of the claim limitations as disputed above.

Because claims 2-15 and 37 depend from and further limit claim 1 (and that claim 1 is in condition for allowance), Applicant submits that claims 2-15 and 37 are also in allowable condition.

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Applicant respectfully submits that independent claim 16 includes similar patentable distinctions over the cited prior art as does claim 1. Thus, Applicant respectfully requests allowance of independent claim 16 and corresponding dependent claims 17-30.

Applicant respectfully submits that independent claim 31 includes similar patentable distinctions over the cited prior art as claim 1. Thus, Applicant respectfully requests allowance of independent claim 31.

Dependent Claim 13-15

The Examiner has rejected claims 13-15 and 28-30 under 35 U.S.C. §103(a) as being obvious over Zahavi in view of Therrien, and in view of Gusler et al., U.S. Patent No. 6,938,057, (hereinafter Gusler).

The Examiner provides no clarification of help information rejection or rebuttal to the argument set forth by the Applicant in the reply to the last office action. Applicant is not persuaded by the rejection analysis and again contends that the claimed invention includes limitations not taught or suggested by the cited prior art.

For example, each of claims 13-15 recites “applying averaging functions to the storage information related to the sizes and ages of files and directories within the files and directories.”

The Examiner cites Gusler at column 8 line 8, which reads as follows:

With reference again to step 700, if log entries are present, a determination is made as to whether log removal is to occur (step 712). This log removal step may be employed to remove log entries or log files when these log entries or files are older than some selected date or over a certain size. If log removal is to occur, the

log entries are removed according to whatever policy has been employed (step 714). This policy can be based on the age of the log entries or the size of the log (i.e., number or entries), or by other factors. Thereafter, the process proceeds to step 702 as described above. The process also proceeds to step 702 if log entry removal is not to occur in step 712. (Emphasis Added)

The Examiner asserts that the above passage in Gusler discloses the limitation of applying averaging functions as in the claimed invention. Applicant respectfully disagrees. Removal of a log entry based on its age or size is not equivalent or suggestive of the above claim limitation. For example, Gusler indicates that removal (e.g., a non-use) of a log entry can produce a set of smaller set of log entries. The claimed invention is not directed toward mere removal of storage information to produce a summary report. Instead, the claimed invention recites applying averaging functions to a chosen set of storage information to produce summary reports. More specifically, the claimed invention recites non-removal and use (not removal and elimination as in Gusler) of storage information related to sizes and ages to produce a size summary record and age summary record. Thus, Gusler teaches away from the claimed invention and the rejection is improper.

Note also that the claimed invention recites producing a size summary record and an age summary record. As its name suggests to one of ordinary skill in the art, “averaging” and application of averaging functions includes deriving a quantity that represents an arithmetic mean of sizes and ages. The claim recites producing the summary record based on application of the “averaging” functions. Neither Gusler nor any other cited reference teaches or suggests producing a size summary record or an age summary record via application of averaging functions. For this additional reason, Gusler does not render the claimed invention obvious.

Accordingly, Applicant respectfully requests allowance of claim 13-15 as well as claims 28-30.

Dependent Claim 37

Claim 37 recites "wherein receiving the data collection policy includes: receiving file filter criteria identifying types of files associated with set of storage entities from which storage information is to be collected; utilizing the filter criteria to collect the storage information; and wherein processing the collected storage information includes applying averaging functions to the storage information to produce the at least one summary record."

To reject this claim, the Examiner cites Zahavi at column 11, lines 11-21, which reads as follows:

An example of the format of the configuration section of the header is presented below:

<CONFIGURATION: LOGICAL VOLUMES TABLE> 0x000, DEV000, R2:00-0xC0, NP:00-0x00, NP:00-0x00, HS:22-0xD2, 0xFFFF, 0, 0x001, DEV001, R2:31-0xD0, NP:00-0x00, NP:00-0x00, HS:22-0xD2, 0xFFFF, 0, 0x002,

Applicant respectfully submits that this passage does not teach or suggest the claim limitations of claim 37.

Claims 32 and 33

In addition to the limitations discussed above with respect to claim 1, claim 32 recites "wherein receiving the data collection policy includes: receiving file filter criteria identifying types of files associated with set of storage entities from which storage information is to be collected; utilizing the filter criteria to collect the storage information; and wherein processing the collected storage

information includes applying averaging functions to the storage information to produce the at least one summary record."

To reject this claim, the Examiner cites FIG. 12 in Zahavi. Applicant respectfully submits that this figure illustrates a screenshot produced as a result of calculations performed by collection manager 38, not collection agent 30. The claimed invention recites that the agent performs the calculations. This claim limitation is therefore not taught or suggested by Zahavi.

Contrary to techniques in Zahavi, claim 33 recites that the agent incorporates a result of the calculation into the summary report prior to transfer to the storage management application. Zahavi recites no such functionality. For example, the collection agent 30 in Zahavi does not perform calculations, nor does it store calculations in the summary report prior to transfer.

Claims 35 and 36

In addition to the limitations discussed above with respect to claim 1, claim 35 recites "wherein processing the collected storage information includes substantially reducing an amount of the data collected by the data collection agent into corresponding statistical information for inclusion in the summary record."

According to the claimed invention, the step of reducing the amount of collected data occurs prior to transfer to the storage management application. Zahavi recites that a calculation operation is performed by the collection manager after receipt of raw data from the agent. Accordingly, the cited reference does not teach or suggest claim 35.

Claim 36 recites "wherein processing the collected storage information to produce the at least one summary record includes: prior to transferring the at

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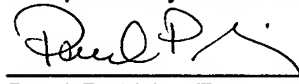
least one summary record from the agent to the storage management application, applying arithmetic operations as specified by the data collection policy to the collected storage information produce the corresponding statistical information for inclusion in the summary record." In a similar vein, there is no indication whatsoever in Zahavi that the agent applies arithmetic operations on raw collected data to produce a summary report that is later transmitted to the storage management application. Accordingly, the cited reference does not teach or suggest claim 36.

Conclusion

Applicant hereby petitions for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-3735.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 616-9660, in Westborough, Massachusetts.

Respectfully submitted,



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